

Endoscopic procedure (Core)

Endoscopic resection, including endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD), is recommended for selected early gastric carcinomas. En bloc resection may be necessary to obtain precise pathological diagnosis. EMR cannot be used to resect lesions larger than 15 mm in one piece, and piecemeal resections are potentially associated with risk of local recurrence. Therefore, for larger lesions, ESD is the better option.¹ The European Society of Gastrointestinal Endoscopy (ESGE), American Gastroenterological Association (AGA) and Japanese Gastric Cancer Association (JGCA) recommend ESD as the treatment of choice for most gastric superficial neoplastic lesions.^{2,3} The standard criteria for endoscopic resection (ER) are 1) T1a; 2) well/moderately differentiated; 3) ≤ 2 centimetres (cm); 4) non-ulcerated; and 5) no lymphovascular invasion (also see National Comprehensive Cancer Network (NCCN) guidelines for gastric cancer).^{2,3} Extended criteria^{2,4} for ESD include: 1) moderately and well differentiated intramucosal carcinoma with no ulcer, size > 2 cm; 2) moderately and well differentiated intramucosal carcinomas, with ulcer, size ≤ 3 cm; 3) moderately and well differentiated carcinomas with early submucosal invasion (SM1) ≤ 500 micrometres (μm), with no ulcer and size ≤ 3 cm; and 4) poorly differentiated intramucosal carcinoma ≤ 2 cm, with no ulcer. Reliable long-term results have not been established for the extended criteria.¹ Table 1 shows therapeutic recommendations for endoscopic treatment of gastric cancer from the 2018 Japanese Gastric Cancer Association (JGCA) treatment guidelines.⁵ Based on pathological examination of the ER specimens, patients are managed with either endoscopic surveillance or surgery.

Table 1: Therapeutic recommendations for endoscopic treatment of gastric cancer based on histopathologic examination of endoscopically resected specimens, from the 2018 Japanese Gastric Cancer Association (JGCA) treatment guidelines.⁶

Endoscopic treatment (EMR/ESD)			
Differentiated ^a		Undifferentiated ^a	
Vertical/deep margin (-) Lymphovascular infiltration (-) Any of following: • Intramucosal without ulcer, any size • Intramucosal with ulcer, diameter ≤ 3 cm • Submucosal, diameter ≤ 3 cm		Vertical/deep margin (-) Horizontal/lateral margin (-) Lymphovascular infiltration (-) Intramucosal without ulcer, diameter ≤ 2 cm	
Yes	No	No	Yes
Follow-up ^b	Surgery		Follow-up

EMR, endoscopic mucosal resection; ESD, endoscopic submucosal dissection.

^a According to the Nakamura classification;⁷ see Table 3 for the corresponding 2017 JGCA and 2019 World Health Organization (WHO) classifications.

^b If the horizontal margin is positive, additional endoscopic treatment or surgery is required.

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<https://www.acgs.uk.com/quality/best-practice-guidelines/>, derived from van Lier et al etc.; and from WHO Classification of Tumours Editorial Board. *World Health Organization Classification of Tumours, Digestive System Tumours. 5th Edition*, 2019. IARC Press, Lyon.⁶

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